NATIONAL PRE-HOSPITAL & HOSPITAL DATA INTEGRATION LISTENING SESSION SUMMIT

AFTERNOON SESSION

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JW Marriott Hotel

Washington, DC

Data Integration

- What is the most important data? How does it change based on the setting (e.g., in the field vs. in the ER)?
- Where does the ePCR land in the EHR? In what format?
- Blog text vs. discrete data readily parsed (e.g., PDF vs. XML)
- Mapping data from one standard to another; from one software vendor to another
- Push vs pull: EMS typically enters data, but does data show up in the EHR automatically (push) or does clinician or someone else have to pull it? Technical details can touch on trade-secrets.
- Culture and workflows can be barriers—deep-set and difficult to change
- Quality control is hard, time/resource consuming, and necessary
- Data collected once is more efficient than re-telling the story at every step.
- "Sources of truth" Multiple sources of the same data / Multiple places to send data

Data sharing: legal and technical barriers

- Misconceptions about HIPAA rules regulating what data hospitals can share with EMS (what EMS has a right to know)
- Software/technological limitations in ability to segment EHR to share information EMS has a right to know
- Communication with stakeholders (e.g., HIPAA coordinator, hospital general counsel) on what's allowed (e.g., patient outcomes specific to EMS encounter vs. prior medical history)
- Defining and implementing sharing of data "minimally necessary for care"
- Managing access and credentialing

Standards

- Multiple standards/families of standards exist (and continue to evolve) to serve individual purposes (NEMSIS, HL7, FHIR, etc.). Disagreement exists about:
 - how well data can be mapped between standards
 - how well standards can meet requirements outside the target environment
- Are standards unknown or not implemented? Is it a communication issue or a feasibility/resource issue?
- Each role in the continuum of care may have different flavor of implementation if not a different standard.
- NEMSIS has been a success in driving data collection nationally and exchange within EMS; doesn't ensure data exchange between pre-hospital and hospital
- Need for standards around outcomes to close the loop/provide feedback
- Standards change over time: systems need to be agile to move with them

- Understanding requirements in pre-hospital care vs. rest of the healthcare system
 - Pre-hospital care
 - Need for deeper understanding how EMS is integrated in the healthcare system from 911 triage through post-acute care
 - Short patient interactions with limited information and little feedback makes improvement in field diagnosis difficult
 - EMS standards and EHR standards developed independently (e.g., leads to difficulty identifying John/Jane Doe)
 - Patient-matching is major issue
 - Healthcare system
 - Need for better understanding of how the clinicians could/would use the EMS information (not just data)

Incentivizing Change

- Clear, documented authority from HHS Office of Civil Rights on HIPAA rules regulating what hospitals can share with EMS (e.g., what EMS has a right to know)
- San Diego as a model example that other orgs can follow; HIEs across the country to learn from
- Incentives for the EMS providers and hospitals entering the data
 - Ensure data quality
 - Avoid data black-hole
- Creating bridges between "islands of success" (including law enforcement data)
- Need to balance top-down requirements vs. local, state, regional successes
- Linking reimbursement system to sharing and use of integrated data
- Evolving payment models and changing incentive structures
- Linking Medicare and Medicaid funding to data exchanges

Value propositions

- Improving time-sensitive care
 - Need for contemporaneous data following (or leading) the patient
 - Saving time collecting/re-collecting information from the patient
- Close the loop
 - Systemic improvements in EMS care by providing timely feedback and patient outcomes
 - Mental health of EMS personnel (validate their role/help them improve)
 - Benchmark performance: Quality and improvement of EMS system
 - Can only improve what you measure well: collect the right data
- Improvements in education, research, and public health

Emphasis on patient care beyond the data

- Need for real-time communication component to accompany data: data might appear in a chart, but still important to communicate between pre-hospital and hospital care on most clinically relevant information
- Making the right data/information presented to the right person at the right time
- Communicate back to the patient

- Patient matching as pre-requisite for many dataintegration goals
 - Patient matching is not a panacea, however
 - HHS still prohibited by law from issuing national patient identifier
 - Takes resources to manually match patients if there's ambiguity; risks of mismatch may not be well understood
 - Legitimate concerns around safety and privacy remain
 - ONC directed by Congress to report on issues of national patient identifier
- Provider identification is important for tracking/integrating data